

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/046433 A2

- (51) International Patent Classification⁷: **A61B**
- (21) International Application Number:
PCT/US2004/036587
- (22) International Filing Date:
3 November 2004 (03.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/517,149 4 November 2003 (04.11.2003) US
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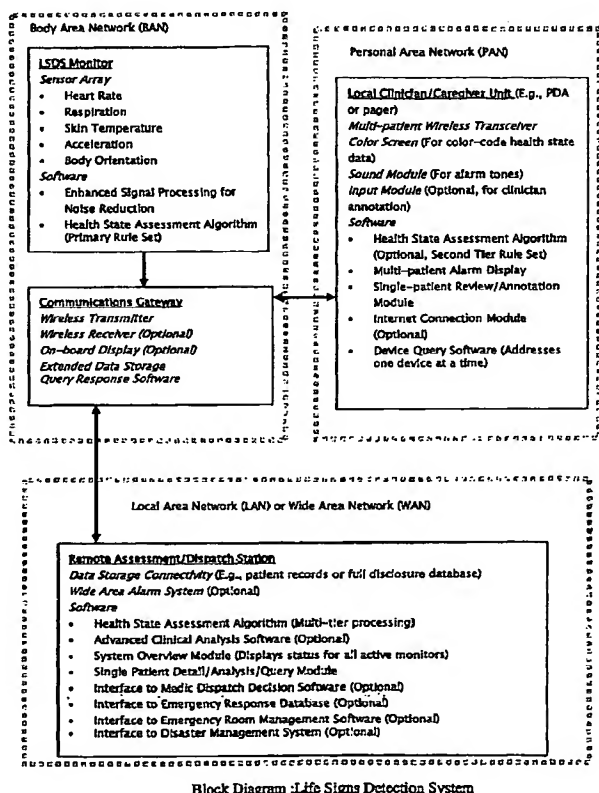
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

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(54) Title: **LIFE SIGN DETECTION AND HEALTH STATE ASSESSMENT SYSTEM**



Block Diagram :Life Signs Detection System

(57) Abstract: A wearable platform embodied in a belt or patch provides physiological monitoring of soldiers during field operations or trauma victims at accident sites and makes health state assessments. The platform includes sensors for heart rate, body motion, respiration rate and intensity, and temperature and further contains a microprocessor and short range transmitter. An analog circuit running an algorithm obtains the R-wave period from the EKG signal and produces electrical pulses with the period between pulses corresponding to the R-wave period. A rule based processing engine having an evaluation algorithm is capable of making a medical evaluation of subject condition and determines a confidence level for the evaluation. The rules are subject to variation depending upon the subject population. The information is communicated wirelessly to a local hub for relay to a remote monitor.

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TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,

Published:

— without international search report and to be republished upon receipt of that report

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